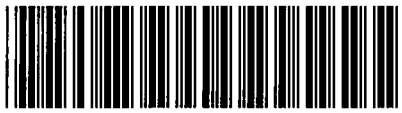

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PUC PROJECT NO. 51840

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RULEMAKING ESTABLISHING ELECTRIC WEATHERIZATION STANDARDS	§ § §	BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS

LOWER COLORADO RIVER AUTHORITY'S RESPONSE TO COMMISSION STAFF'S REQUEST FOR COMMENTS

TO THE HONORABLE PUBLIC UTILITY COMMISSION OF TEXAS:

The Lower Colorado River Authority (LCRA) appreciates the opportunity to offer comments in response to Commission Staff's questions in this project and looks forward to working with the Commission and stakeholders to implement this critical aspect of Senate Bill 3.

I. INTRODUCTION

LCRA is a political subdivision of the State of Texas, created and functioning as a non-profit conservation and reclamation district under the Texas Constitution. LCRA has no taxing authority, receives no general funds in the legislative appropriation process, and relies on its own authority to generate revenues to provide its operating funds. LCRA owns and operates more than 3,300 MW of diverse generation resources in the Electric Reliability Council of Texas ("ERCOT") wholesale market. LCRA serves the wholesale power needs of 33 municipally owned utilities and electric cooperatives.

II. RESPONSE TO QUESTION 1

Question 1:

To fulfill the requirements of Texas Utilities Code § 35.0021(b), under what weather emergency conditions should the Commission require a provider of electric generation service in the Electric Reliability Council of Texas (ERCOT) power region to be able to operate its generation facilities? At a minimum, please address standards for temperature, icing, wind, flooding, and drought conditions. For each, please address whether the standard should vary by region or by type of

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generation facility. Please provide any relevant support for your recommendations, including existing or proposed standards in other jurisdictions, or related studies.

A. A "one size fits all" rule for existing generation resources would be impractical and ineffective.

As a first principle, LCRA urges the Commission to recognize that conditions and capabilities of generation resources vary considerably, even those of the same fuel type or located in the same geographic region. This diversity largely stems from the range in plant vintages across ERCOT, coupled with the varying climate, geography, operating conditions, and other factors that influenced the design criteria for these facilities at the time of their construction. Notably, more than 50 percent of the generating capacity in ERCOT today is produced by units that are more than 20 years old, and 42 percent of the capacity is produced from units that are 30 years or older.

For legacy facilities to meet an entirely new set of design criteria, significant costs must be incurred to retrofit or rebuild them. Based on preliminary analysis, LCRA anticipates that the cost required to retrofit an existing generating facility to meet new, more stringent design criteria could match or exceed the next three to five years' worth of net cash flows associated with the unit. This may jeopardize the ability for certain units to continue to operate. Further complicating matters, existing resource owners will face serious supply chain constraints for the foreseeable future. This year's extreme winter weather affected not only generators in ERCOT, but utilities across much of the country that are performing ongoing storm-related maintenance and rely on many of the same contractors and material suppliers.[1] This challenge, along with the continued impacts of the global Covid-19 pandemic, will severely hamper the ability of resource owners to initiate and complete major retrofitting projects for some time. Should the Commission decide to implement

[1] Note that the vertically integrated utilities outside ERCOT with whom ERCOT generators will be competing for vendor availability and resources are able to cover their expenditures through regulated rates.

retroactive design standards for existing generation resources, it will be imperative that the rules factor in the length of time that resource owners will need for implementation, as well as the complexity required for ERCOT to coordinate the necessary generation outages for all the required maintenance activities to be performed. Put simply, it will take years for the existing generation fleet to conduct the necessary engineering analyses, procure materials, perform the work, and stage these outages so that sufficient generation resources are still available to serve demand in the meantime.

It is also important to consider that the cost to retrofit or rebuild an existing generation facility to operate in more extreme weather conditions is significantly greater than the cost to design and build a new generation facility to operate in the same extreme conditions before the facility is in service. In addition, because the insulation systems (and, therefore, the temperature ratings of the plants) degrade over time, additional costs would have to be incurred going forward for facilities to maintain even their original design values. The cumulative effect of different combinations of weather elements, particularly wind and precipitation, also make imposing a singular weather standard across all resources or types of resources impractical. In other words, while a generation facility may be designed to operate at a certain temperature, that facility may not be designed to operate at the same temperature if wind and ice are also factors.

Given all these complexities, LCRA believes that while it would be appropriate and considerably more cost-effective for the Commission to consider adopting weather condition-specific requirements that apply going forward for new generation facilities, it would be problematic to do so retroactively. For these reasons, the Commission's weatherization rule should not impose a "one size fits all" standard on existing generation resources.

B. The Commission should be cognizant of the consequences that a retroactive, one-size-fits-all rule will have for resource adequacy and resiliency in ERCOT.

If the Commission adopts a single temperature standard or other similar metric to which all existing generation facilities must adhere, resource owners will be forced to evaluate the economics associated with retrofitting their facilities to meet a more rigorous standard than the facilities were designed for—which could very well lead to accelerated plant retirements or increased seasonal unavailability. Given the substantial costs required and the absence of a funding mechanism for competitive generators in ERCOT, a sudden change in the rules that would effectively mandate retrofitting or reconstruction of existing generation facilities should not be hastily adopted without a full evaluation of the economic and reliability impacts. This evaluation must account for the timelines under which retrofitting projects can be realistically completed and the stress to the ERCOT system that will result from so many units having to go offline for the associated maintenance outages.

A better approach—and one that can be achieved within the current statutory timeline—would be to require existing generation resources to operate in accordance with the parameters to which they were designed (such as minimum and maximum temperature, as indicated in the resource's registration data).[2] Such an approach would still hold resource owners accountable for taking all reasonable actions to ensure their plants perform during foreseeable hot and cold weather events, without imposing an unattainable standard that will ultimately threaten resource adequacy by forcing resources to sideline themselves when they are needed most. By placing the focus on the resource owner's actions and requiring them to take reasonable steps (and make reasonable

[2] These practical constraints should also be reflected as sensitivities in ERCOT's seasonal assessments of resource adequacy. Because not all generation resources were designed to perform in the same summer and winter conditions, reflecting that variability in the reports that our state leaders and policymakers, market participants, and developers rely on is vital.

investment) to maximize their plants' performance up to achievable levels, the rule will create correct incentives.

For new generation resources, however, the Commission's rules should specify the temperature, wind, and other design tolerances that reflect the needs of the ERCOT system based on the new high-water marks that have actually been experienced. Clear and specific rules will give investors fair notice of the Commission's expectations going forward and allow resource owners to weather-harden their units prior to commercial operation when it is most feasible and economical to do so.

C. The Commission's rule should be based on best practices, developed through stakeholder collaboration, to maximize grid preparedness.

LCRA appreciates the time constraints that govern this rulemaking project and supports the Commission expeditiously adopting a rule consistent with the principles articulated above—namely, that an existing generation resource should be held to standards that are consistent with the specific design criteria for that facility, while any new, more stringent requirements apply only prospectively to new generation resources. In the longer term, the best reliability outcome for electric customers in ERCOT will be for the Commission to continue to have rules that are clear, achievable, based on lessons learned, and focused on what is within a resource owner's control. A best practices group of market participants convened to collaborate on effective weatherization practices and operational procedures should be a primary feature of the Commission's weatherization oversight going forward. A coordinated industry weatherization program built around prevention and preparation will be far more effective than one that ties enforcement outcomes to factors that cannot be controlled. Other key guiding principles should include nondiscrimination, so that rules do not disproportionately impact generation resources based on

fuel type, and transparency, so that the public remains apprised of the steps the Commission is taking to improve the reliability of the ERCOT grid.

III. CONCLUSION AND PRAYER

LCRA appreciates the Commission's consideration of these comments and looks forward to working with the Commission Staff and other stakeholders to develop clear and effective weatherization standards.

Respectfully submitted,

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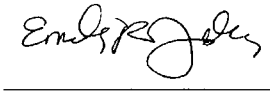

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